

## WATER QUALITY DATA

A summary of test results is provided in the table below. The majority of data in this table are from testing done during 2003. If after reading this report you need additional information or service, please feel free to call our water quality experts at 428-3647 during normal business hours.

### Terms and abbreviations used below:

■ **Maximum Contaminant Level (MCL)**: the highest level of a contaminant set that is allowed in drinking water. EPA sets MCLs as close to the MCLGs as feasible using the best available treatment technology.

■ **Action Level (AL)**: the concentration of a contaminant prescribed by the EPA which, when exceeded, triggers treatment or other requirements which a water system must follow.

■ **NTU**: nephelometric turbidity units ■ **ppm**: parts per million or milligrams per liter ■ **pCi/L**: picocuries per liter (a measure of radiation) ■ **n/a**: not applicable ■ **nd** not detected at testing limit

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
Inorganic contaminants							
Aluminum (ppb)	n/a	12	50	ND-100			
Antimony (ppb)	6	1	Not found				
Arsenic (ppb)	50	1	1.6				
Barium (ppm)	2.00	1	0.024				
Beryllium (ppb)	4	1	Not found				
Cadmium (ppb)	5	1	Not found				
Calcium (ppm)	n/a	20	25	23-27			
Chromium (ppb)	100	1	4.3				
Copper (ppb)	AL=1300	50	140 (=90%tile)	6.5-160			
Cyanide (ppb)	200	1	Not found				
Fluoride (ppm)	2.2	1057	0.88	0-1.06			
Iron (ppb)	300	1	Not found				
Lead (ppb)	AL=15	50	10 (=90%tile)	ND-55 (4 samples >15)			
Magnesium (ppm)	n/a	1	7.4				
Manganese (ppb)	300	1	Not found				
Mercury (ppb)	2	1	Not found				
Nickel (ppb)+++++++	100	1	3.8				
Nitrate (ppm)	10	11	0.13	0.04-0.26			

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
Nitrite (ppb)	1000	1	Not found				
Potassium (ppm)	n/a	1	1.7				
Selenium (ppb)	50	1	3.5				
Silver (ppb)	100	1	Not found				
Sodium (ppm,)	n/a	1	16				
Sulfate (ppm)	250	4	19	18-19			
Thallium (ppb)	2	1	Not found				
Zinc (ppb)	5000	1	Not found				
Alkalinity (ppm)	n/a	20	64	60-68			
Chlorides (ppm)	250	4	31	28-33			
Color	color unit	11	3	2.5-5			
pH	pH unit	364	7.7	6.9-8.6			
Total Hardness (ppm)	n/a	1	96				
Total Organic Carbon (ppm)	n/a	1	2.2				
Turbidity - entry point (NTU)	**	2184	0.06	0.03-0.23			
Turbidity distribution system (NTU)	***	2402	0.2	0.04-2.3			
Chlorine residual - entry point (ppm)	****	2191	0.86	0.1-1.22			
Chlorine residual - distribution (ppm)	*****	2362	0.70	ND-3.5			
Coliform - entry point (% positive)	n/a	362	0.3%				
Coliform - distribution system (% pos) <sup>1</sup>	5%	2406	0.4%	ND-1.5%			
Asbestos (million fibers/L)	7	1	Not found				
Volatile Organics (ppb)							
Benzene	5	1	Not found		4	not found	
Bromobenzene	5	1	Not found		4	not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
Bromochloromethane	5	1	Not found		4	not found	
Bromomethane	5	1	Not found		4	not found	
n-Butylbenzene	5	1	Not found		4	not found	
Carbon tetrachloride	5	1	Not found		4	not found	
Chlorobenzene	5	1	Not found		4	not found	
Chloroethane	5	1	Not found		4	not found	
Chloromethane	5	1	Not found		4	not found	
2-Chlorotoluene	5	1	Not found		4	not found	
4-Chlorotoluene	5	1	Not found		4	not found	
dibormomethane	5	1	Not found		4	not found	
1,2-Dichlorobenzene	5	1	Not found		4	not found	
1,3-Dichlorobenzene	5	1	Not found		4	not found	
1,4-Dichlorobenzene	5	1	Not found		4	not found	
Dichlorodifluoromethane	5	1	Not found		4	not found	
1,1-Dichloroethane	5	1	Not found		4	not found	
1,2-Dichloroethane	5	1	Not found		4	not found	
1,1-Dichloroethene	5	1	Not found		4	not found	
cis-1,2-Dichloroethene	5	1	Not found		4	not found	
trans-1,2-Dichloroethene	5	1	Not found		4	not found	
1,2-Dichloropropane	5	1	Not found		4	not found	
1,3_Dichloropropane	5	1	Not found		4	not found	
2,2_Dichloropropane	5	1	Not found		4	not found	
1,1-Dichloropropene	5	1	Not found		4	not found	
cis-1,3-Dichloropropene	5	1	Not found				
trans-1,3-Dichloropropene	5	1	Not found		4	not found	
Ethyl benzene	5	1	Not found		4	not found	
Hexachlorobutadiene	5	1	Not found		4	not found	
Isopropylbenzene	5	1	Not found		4	not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
p-Isopropyltoluene	5	1	Not found		4	not found	
Methylene chloride	5	1	Not found		4	not found	
Naphthalene	n/a	n/a			4	not found	
n-Propylbenzene	5	1	Not found		4	not found	
Styrene	5	1	Not found		4	not found	
1,1,1,2-tetrachloroethane	5	1	Not found		4	not found	
1,1,2,2-Tetrachloroethane	5	1	Not found		4	not found	
Tetrachloroethene	5	1	Not found		4	not found	
Toluene	5	1	Not found		4	not found	
1,2,3-Trichlorobenzene	5	1	Not found		4	not found	
1,2,4-Trichlorobenzene	5	1	Not found		4	not found	
1,1,1-Trichloroethane	5	1	Not found		4	not found	
1,1,2-Trichloroethane	5	1	Not found		4	not found	
Trichloroethene	5	1	Not found		4	not found	
Trichlorofluoromethane	5	1	Not found		4	not found	
1,2,3-Trichloropropane	5	1	Not found		4	not found	
1,2,4-trimethylbenzene	5	1	Not found		4	not found	
1,3,5-trimethylbenzene	5	1	Not found		4	not found	
Xylenes	5	1	Not found		4	not found	
Vinyl chloride	5	1	Not found		4	not found	
MTBE	n/a	1	Not found				
<b>Organics, Pesticides, PCBs (ppb)</b>							
1,2-Dibromo-3-Chloropropane	0.2	1	Not found		4	not found	
1,2-Dibromoethane (EDB)	0.05	1	Not found		4	not found	
2,4,5-TP (Silvex)	10	1	Not found		4	not found	
2,4-D	50	1	Not found		4	not found	
3-Hydroxycarbofuran	50	1	Not found		1	not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
Alachlor	2	1	Not found		1	not found	
Aldicarb	3	1	Not found		1	not found	
Aldicarb Sulfone	2	1	Not found		1	not found	
Aldicarb Sulfoxide	4	1	Not found		1	not found	
Aldrin	50	1	Not found		4	not found	
Atrazine	3	1	Not found		1	not found	
Benzo(a)pyrene	0.2	1	Not found		1	not found	
Bis(2-Ethylhexyl)Phthalate	6	1	Not found		1	not found	
Butachlor	50	1	Not found		1	not found	
Carbaryl	50	1	Not found		1	not found	
Carbofuran	40	1	Not found		1	not found	
Dalapon	50	1	Not found		1	not found	
bis(2-Ethylhexyl) Adipate	50	1	Not found		1	not found	
Dicamba	50	1	Not found		1	not found	
Dieldrin	50	1	Not found		4	not found	
Dinoseb	7	1	Not found		1	not found	
Dioxin	0.03	n/a			1	not found	
Diquat	20	n/a			1	not found	
Endothall	50	n/a			1	not found	
Endrin	2	1	Not found		4	not found	
Glyphosate	50	n/a			4	not found	
Heptachlor	0.4	1	Not found		4	not found	
Heptachlor Epoxide	0.2	1	Not found		4	not found	
Hexachlorobenzene	1	1	Not found		1	not found	
Hexachlorocyclopentadiene	50	1	Not found		1	not found	
Lindane	0.2	1	Not found		4	not found	
Methomyl	50	1	Not found		1	not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
Methoxychlor	40	1	Not found		4	not found	
Metolachlor	50	1	Not found		1	not found	
Metribuzin	50	1	Not found		1	not found	
Oxamyl	50	1	Not found		1	not found	
PCB's Total	0.5	1	Not found		4	not found	
Pentachlorophenol	1	1	Not found		1	not found	
Pichloram	50	1	Not found		1	not found	
Propachlor	50	1	Not found		4	not found	
Simazine	4	1	Not found		1	not found	
Total Chlordane	2	1	Not found		4	not found	
Toxaphene	3	1	Not found		4	not found	
4,4'-DDT	n/a	1	Not found		4	not found	
Mirex	n/a	1	Not found		4	not found	
<b>Disinfectant Byproducts (ppb)</b>							
Total THMs	80	16	37	13-61			
Total HAAs	60	16	30	5-44			
<b>Unregulated Contaminants Monitoring (ppb)(2002 data)</b>							
2,4-dinitrotoluene	n/a	3	Not found				
2,6- dinitrotoluene	n/a	3	Not found				
Acetochlor	n/a	3	Not found				
DCPA mono-acid degradate	n/a	3	Not found				
DCPA di-acid degradate	n/a	3	Not found				
4,4'-DDE	n/a	3	Not found				
EPTC	n/a	3	Not found				
Molinate	n/a	3	Not found				
Nitrobenzene	n/a	3	Not found				
Perchlorate	n/a	3	Not found				

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# tests	avg	range	# tests	avg	range
Terbacil	n/a	3	Not found				
<b>Radionuclides (pCi/L)</b>							
Gross alpha	15	1	Not found		1(1997)	not found	
Gross Beta	50	1	Not found		1(1997)	not found	

Table footnotes:

1) In 1993, the New York State Department of health granted the city what is known as a biofilm variance to the total coliform bacteria MCL. Biofilm refers to a layer of bacteria that can be found on water pipe surfaces. A biofilm variance is only allowed where the coliform bacteria recovered from a water system are identified as non-disease causing environmental strains originating from the pipeline biofilm and not from an external source of contamination. The City of Rochester is one of several large suppliers nationwide holding a bilfilm variance.

\*\* = 95% of measurements within a given month must be less than 0.5 ntu.

\*\*\* = Average of monthly distribution system samples must be less than 5.0 ntu.

\*\*\*\* = Water entering the distribution must have a chlorine residual greater than 0.2 and less than 4 ppm.

\*\*\*\*\* = 95% of monthly distribution system samples must have a measurable chlorine residual.

Note: Total Hardness is also expressed in grains per gallon. The grains of hardness in the Onatario and hemlock supplies are 7.6 & 5.6, respectively.